

## ABSTRACT OF THE DISCLOSURE

The present invention is directed to a method of separating oligodendrocyte cells or progenitor cells thereof from a mixed population of cells. It  
5 comprises selecting a promoter which functions only in the oligodendrocyte cells or progenitor cells thereof, introducing a nucleic acid molecule encoding a fluorescent protein under control of that promoter into the mixed population cells, allowing the oligodendrocyte cells or progenitor cells thereof to express the fluorescent protein, and separating the fluorescent cells from the mixed population cells, where the  
10 separated cells are the oligodendrocyte cells or progenitor cells thereof. The invention also relates to the isolated and enriched human oligodendrocyte cells or progenitor cells thereof.